

Amendments to the Claims

Claim 1 (Currently amended): A multiple compartment dishwasher comprising:

- a housing;
- a first compartment for washing within the housing;
- a second compartment for washing within the housing;
- a plurality of dishwasher components each having a power load when activated;
- at least one of the plurality of dishwasher components operatively disposed within the first compartment;
- at least one of the plurality of dishwasher components operatively disposed within the second compartment; and
- a power limiting distribution control system operatively connected to each of the plurality of dishwasher components for managing distribution of power during independent washing and simultaneous use;

the first compartment and the second compartment both adapted for independent washing and simultaneous use.

Claim 2 (Original): The dishwasher of claim 1 wherein the power limiting distribution control system includes an electrical isolation circuit operatively connected to one of the plurality of dishwasher components.

Claim 3 (Original): The dishwasher of claim 2 wherein the electrical isolation circuit includes an opto-coupler.

Claim 4 (Original): The dishwasher of claim 1 wherein the power limiting distribution system includes an intelligent control, the intelligent control operatively connected to each of the plurality of dishwasher components for managing distribution of power.

Claim 5 (Original): The dishwasher of claim 4 wherein the intelligent control is selected from the set comprising a digital logic circuit, a processor, a controller, a microcontroller, a plurality of microcontrollers, and an integrated circuit.

Claim 6 (Original): The dishwasher of claim 4 wherein the intelligent control includes a first compartment microcontroller operatively connected to at least one of the plurality of dishwasher components disposed within the first component.

Claim 7 (Original): The dishwasher of claim 6 wherein the intelligent control includes a second compartment microcontroller operatively connected to at least one of the plurality of dishwasher components disposed within the second compartment and a communications bus electrically connected to the first compartment microcontroller and the second compartment microcontroller.

Claim 8 (Original): The dishwasher of claim 7 further comprising a user interface controller electrically connected to the communications bus.

Claim 9 (Original): The dishwasher of claim 1 further comprising at least one current sensor electrically connected to the power limiting distribution control system for determining current draw.

Claim 10 (Currently amended): A multiple compartment dishwasher comprising:
a first dishwasher compartment adapted for independent washing;
a second dishwasher compartment adapted for independent washing;
a first plurality of electrical energy using dishwasher components associated with the first dishwasher compartment;
a second plurality of electrical energy using dishwasher components associated with the second dishwasher compartment;
an electrical control system operatively connected to the first plurality of electrical energy using dishwasher components and the second plurality of electrical energy using dishwasher compartments for managing distribution of power; and
the electrical control system adapted for providing for independent control and simultaneous use of the plurality of dishwasher compartments.

Claim 11 (Original): The multiple compartment dishwasher of claim 10 further comprising a first electrical isolation circuit electrically connected to the electrical control system and at least one of the first plurality of electrical energy using dishwasher components.

Claim 12 (Original): The multiple compartment dishwasher of claim 11 further comprising a second electrical isolation circuit electrically connected to the electrical control system and at least one of the second plurality of electrical energy using dishwasher components.

Claim 13 (Original): The multiple compartment dishwasher of claim 10 wherein the electrical control system includes a power management controller operatively connected to the first plurality of electrical energy using dishwasher components and the second plurality of electrical energy using dishwasher components.

Claim 14 (Original): The multiple compartment dishwasher of claim 13 further comprising a user interface controller operatively connected to the power management controller.

Claim 15 (Original): The multiple compartment dishwasher of claim 10 wherein the electrical control system includes a first controller operatively connected to the first plurality of electrical energy using dishwasher components and a second controller operatively connected to the second plurality of electrical energy using dishwasher compartments.

Claim 16 (Original): The multiple compartment dishwasher of claim 15 further comprising a user interface controller operatively connected to the first controller and the second controller.

Claim 17 (Original): The multiple compartment dishwasher of claim 10 wherein the electrical control system includes a digital logic circuit for preventing simultaneous use of dishwasher components.

Claim 18 (New): A multiple compartment dishwasher, comprising:
a first dishwashing compartment;
a second dishwashing compartment;
the first dishwashing compartment and the second dishwashing compartment adapted to be used separately or simultaneously;
a power limiting distribution control system for managing distribution of power to components associated with the first dishwashing compartment and the second dishwashing compartment;
the power limiting distribution control system adapted for controlling power usage when both the first dishwashing compartment and the second dishwashing compartment are used simultaneously to thereby avoid exceeding a rated current draw.

Claim 19 (New): The multiple compartment dishwasher of claim 18 wherein the first dishwashing compartment is positioned above the second dishwashing compartment.

Claim 20 (New): The multiple compartment dishwasher of claim 19 wherein the first dishwashing compartment is smaller than the second dishwashing compartment for different sized dishwasher loads.